

REMARKS

A. Finality of Office Action

In response to an Office Action mailed on January 24, 2006 Applicants filed an Amendment on April 27, 2006, wherein FIG. 1 was amended so as to include the label “Prior Art” and claim 1 was amended to delete “that” in order to correct a grammatical error. In response to the April 27th Amendment, the Office Action of August 9, 2006 was made final. Applicants traverse the finality of the Office Action. In particular, claim 7 was rejected in the January 24th Office Action as being anticipated by Roden while the August 9th Office Action has rejected claim 7 as being obvious in view of Roden and Assow. Since Applicants’ Amendment of April 27, 2006 did not amend claim 7, the change in the rejection of claim 7 was not caused by Applicants’ April 27th Amendment. Accordingly, the August 9th Office Action cannot be made final per MPEP § 706.07(a) and so the finality of the August 9th Office Action should be withdrawn.

B. 35 U.S.C. § 102

In the Office Action of August 9, 2006, claims 1-4 were rejected under 35 U.S.C. § 102(e) as being anticipated by Roden et al. Applicants traverse this rejection for several reasons. First, claim 1 recites a first and a second constant current source. Roden does not disclose using a constant current source. It is noted that the Examiner asserts at page 4 of the Office Action that “while Roden does not explicitly disclose the use of constant current, the use of constant voltages with a set impedance loop are taught” so that “[u]ntil a fault, constant voltage (and hence constant current) will be provided (see Figs 2A and 3A).” The assertion is faulty. Regarding the impedance loop, it is not constant. For example, since capacitor C1 is not charged when

applying the voltage for the first time, quite a high current will flow into C1 at the beginning. Switches Q1-Q6 cannot limit the current flowing into C1 as evidenced by the fact that turning switches Q1-Q6 off will not prevent the flowing of current into C1. Thus, the current will not be constant. Accordingly, Roden does not disclose the recited constant current sources. Accordingly, the rejection is improper and should be withdrawn.

The rejection of claim 1 is improper for the additional reason that Roden et al. fails to disclose “an electronic control device that controls both said first constant current source and said second constant current source in parallel.” The Office Action apparently regards controller 800 as reading on the recited electronic control device. If this is the case, the controller 800 does not control two constant current sources in parallel since Roden et al. does not disclose any constant current sources. Accordingly, the rejection is improper and should be withdrawn.

The rejection of claim 3 is improper because Roden et al. does not disclose a common control signal for both constant current sources being generated from an output signal of a current sensor. As mentioned above, Roden et al. does not disclose any constant current sources and so it follows that Roden et al. does not disclose the recited common control signal.

The rejection of claim 4 is improper because Roden et al. does not disclose switching off both constant current sources if an output signal of a current sensor is too high. Roden et al. discloses that an output signal of controller circuitry 800 interrupts switches when the current exceeds a threshold value (Col. 8, ll. 16-18). Nowhere does Roden et al. disclose that circuitry turns off constant current sources.

The rejections of claims 5 and 6 are improper because Roden et al. does not disclose switching on both constant current sources if an output signal of a current sensor is too low.

Nowhere does Roden et al. disclose that circuitry turns on constant current sources based on an output signal of a current sensor. It is noted that the Office Action at page 5 indicates that claims 5 and 6 contain allowable subject matter. Applicants will take this to mean that the listing of claims 5 and 6 in the rejection as being made in error.

Despite the impropriety of the rejection, claims 1, 2, 4 and 5 have been canceled, claim 6 has been placed in independent form and claim 3 has been amended so as to depend from claim 6. Since claim 6 has been indicated to contain allowable subject matter, claim 6 and its dependent claim 3 should be allowed.

Note that the amendment made to claim 3 is being made solely to provide additional coverage for the charging circuit of claim 6 and so is not related to patentability as defined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd*, 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000) (*en banc*), *overruled in part*, 535 U.S. 722 (2002) (hereinafter *Festo I*).

As mentioned above, claim 6 is being amended so as to be in independent form. To the extent that the amendment incorporates subject matter that was inherently present in claim 6 previously, the amendment is not related to patentability. *See, Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd*, 535 U.S. 722 (2002) (hereinafter *Festo II*).

C. **35 U.S.C. § 103**

1. **Roden et al. and Assow**

Claims 7 and 8 were rejected under 35 U.S.C. § 103 as being obvious in view of Roden et al. and Assow. Claim 7 has been amended so as to depend directly on claim 6 and claim 8 depends directly on claim 7. As pointed out above in Section B, Roden et al. does not disclose either using two constant current sources or an electronic device that control two constant current

sources in parallel. Assow does not cure the deficiencies of Roden et al. since it does not suggest altering Roden et al. to use either two constant current sources or an electronic device that control two constant current sources in parallel. Without such suggestion, the rejection is improper and should be withdrawn.

As pointed out above, claims 7 and 8 have been amended to depend directly or indirectly on claim 6 which has been indicated to contain allowable subject matter. Accordingly, claims 7 and 8 should be allowable for at least the same reasons that claim 6 is allowable.

Note that the amendment made to claim 7 is being made solely to provide additional coverage for the charging circuit of claim 6 and so is not related to patentability as defined in *Festo I*.

2. Roden et al. and Glennon

Claims 9 and 10 were rejected under 35 U.S.C. § 103 as being obvious in view of Roden et al. and Glennon. Claim 9 has been amended so as to depend from claim 6 resulting in claim 10 depending indirectly on claim 6. As pointed out above in Section B, Roden et al. does not disclose either using two constant current sources or an electronic device that control two constant current sources in parallel. Glennon does not cure the deficiencies of Roden et al. since it does not suggest altering Roden et al. to use either two constant current sources or an electronic device that control two constant current sources in parallel. Without such suggestion, the rejection is improper and should be withdrawn.

As pointed out above, claims 9 and 10 depend directly or indirectly on claim 6 which has been indicated to contain allowable subject matter. Accordingly, claims 9 and 10 should be allowable for at least the same reasons that claim 6 is allowable.

Note that the amendment made to claim 9 is being made solely to provide additional coverage for the charging circuit of claim 6 and so is not related to patentability as defined in *Festo I*.

CONCLUSION

In view of the arguments above, Applicants respectfully submit that all of the pending claims 3 and 6-10 are in condition for allowance and seek an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorneys at (312) 321-4200.

Respectfully submitted,



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